

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended): An overlay routing processor for transferring information over a computer network, wherein the computer network has a native routing protocol the overlay routing processor comprising

instructions for associating computers on the computer network with a given overlay group;

instructions for determining whether received information is associated with the given overlay group; and

instructions for routing the received information to the computers associated with the given overlay group ~~by~~ using the native routing protocol, wherein at least some of the received information is routed using unicast packets.

Claims 2 - 9. (canceled)

10. (original) The overlay routing processor of claim 1, further comprising instructions for handling administrative scoping.

11. (original) The overlay routing processor of claim 1, further comprising instructions for servicing plugin modules.

12. (original) The overlay routing processor of claim 1, further comprising instructions for placing a limit on the number of transfers between computers for a given portion of information.

13. (currently amended) The overlay routing processor of claim 12, wherein information is transferred between the computers in packets, the overlay routing processor further comprising

instructions for placing a “time-to-live” value in a field in a packet.

14. (original) The overlay routing processor of claim 1, further comprising instructions for preventing the transfer of information between predetermined computers.

15. (original) The overlay routing processor of claim 14, wherein one or more computers are identified by an address, the overlay routing processor further comprising using the address to prevent the transfer of information between predetermined computers.

16. (currently amended) A routing device in a computer network, the device comprising:

instructions for detecting a client request for content information from a client computer;

instructions that identify a routing processor for handling the client request;

instructions that obtain communication information from the routing processor; and

instructions that transmit the communication information to the client computer, wherein the communication information provides the client computer with a preferred way to communicate with the routing processor.

17. (original) The server of claim 16, wherein the instructions that identify a processor include

instructions that provide a uniform resource locator to the client computer.

18. (original) The server of claim 17, wherein the instructions that identify a processor include

instructions that provide an overlay address corresponding to the content information to the client computer.

19. (currently amended) A device in a computer network, the device comprising:

instructions that ~~detect~~ for detecting a client request for content information from a client computer;

instructions that ~~identify~~ for identifying a processor for handling the client request;

instructions that ~~obtain~~ for obtaining a communication resource from the processor to be used to facilitate transfer of information between the client computer and the processor;

instructions that ~~transmit~~ for transmitting the communication information to the client computer, wherein the communication information provides the client computer with a preferred way to communicate with the processor.;

instructions that ~~obtain~~ for obtaining, from the identified processor, a communication resource to allow transfer of information between the client computer and the processor; and

instructions for transferring information about the communication resource to the client computer.

20. (original) The device of claim 19, wherein the communication resource is a port identifier.

21. (currently amended) A method for performing overlay routing in a computer network, the computer network including multiple computers coupled to allow

information transfer over the computer network, the computer network having a native routing protocol, the method comprising the following:

associating computers on the computer network with a given overlay group;
determining whether received information is associated with the given overlay group;

routing the received information to the computers associated with the given overlay group by using the native routing protocol;

associating a native group with an overlay group; and
changing the association between an overlay group and a native group.

22. (currently amended) A computer-readable media programmed with instructions for performing overlay routing in a computer network, the computer network including multiple computers coupled to allow information transfer over the computer network, the computer network having a native routing protocol, ~~the instructions including~~ comprising:

instructions for associating computers on the network with a given overlay group;

instructions for determining whether received information is associated with the given overlay group; and

instructions for routing the received information to the computers associated with the given overlay group by using the native routing protocol;

wherein at least some of the routing uses an addressing strategy that carries overlay addresses in an additional overlay header and native multicast addresses are computed from the overlay addresses.

23. (currently amended): An overlay routing processor for transferring information over a computer network, wherein the computer network has a native routing protocol, the overlay routing processor comprising:

instructions for associating computers on the computer network with a given overlay group;

instructions for determining whether received information is associated with the given overlay group;

instructions for routing the received information to the computers associated with the given overlay group by using the native routing protocol;

a data table accessed by the processor for defining peer relationships between overlay processors; and

wherein the instructions for routing include instructions for using the defined peer relationships between overlay processors to perform the routing.